

In the Claims

Applicant has submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Please cancel claims 2-40 without prejudice or disclaimer.

1. (Original) A method for inducing an immune response, comprising:
topically administering to a subject an oil-in-water emulsion and an immunostimulatory nucleic acid in an effective amount to induce an immune response.
2. - 40. (Cancelled)
41. (Original) A composition comprising
an immunostimulatory nucleic acid and an oil-in-water emulsion, formulated for topical skin or mucosal delivery.
42. (Original) The composition of claim 41, further comprising administering an antigen.
43. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid is a CpG immunostimulatory nucleic acid.
44. (Original) The composition of claim 41, wherein the oil-in-water emulsion and the immunostimulatory nucleic acid is administered to a mucosal surface.
45. (Original) The composition of claim 44, wherein the mucosal surface is an oral surface, a rectal surface, a nasal surface, a vaginal surface or an ocular surface.
46. (Original) The composition of claim 41, wherein the oil-in-water emulsion and the immunostimulatory nucleic acid is administered to a skin surface.

47. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid is a T-rich nucleic acid.

48. (Original) The composition of claim 47, wherein the T-rich nucleic acid has a sequence selected from the group consisting of SEQ ID NOs: 52 - 57 and SEQ ID NOs: 62 - 94.

49. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid is a poly-G nucleic acid.

50. (Original) The composition of claim 49, wherein the poly-G nucleic acid has a sequence selected from the group consisting of SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 58, SEQ ID NO: 61 and SEQ ID NOs: 95 -133.

51. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid has a sequence selected from the group consisting of SEQ ID NOs: 1 - 146.

52. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid has a modified backbone.

53. (Original) The composition of claim 52, wherein the modified backbone is a phosphate modified backbone.

54. (Original) The composition of claim 53, wherein the phosphate modified backbone is a phosphorothioate modified backbone.

55. (Original) The composition of claim 53, wherein the modified backbone is a peptide modified oligonucleotide backbone.

56. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid has the nucleotide sequence of TCG TCG TTT TGT CGT TTT GTC GTT (SEQ ID NO:147), TCG TCG TTT CGT CGT TTC GTC GTT (SEQ ID NO:148), TCG TCG TTT TTC GGT CGT TTT (SEQ ID NO:149), TCG TCG TTT CGT CGT TTT GTC GTT (SEQ ID NO:150), TCG TCG TTT TGT CGT TTT CGA (SEQ ID NO:151) or TCG TCG TTT TTC GTG CGT TTT T (SEQ ID NO:152).

57. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid has the nucleotide sequence of TCGTCGTTGTCGTTTGTGCGTT (SEQ ID NO:153).

58. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid and oil-in-water emulsion is formulated for mucosal delivery.

59. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid and oil-in-water emulsion is formulated for oral delivery, ocular delivery, nasal delivery, vaginal delivery or rectal delivery.

60. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid and oil-in-water emulsion is formulated for skin delivery.

61. (Original) The composition of claim 41, wherein the immunostimulatory nucleic acid is a class A immunostimulatory nucleic acid, a class C immunostimulatory nucleic acid, a semi-soft immunostimulatory nucleic acid or a soft immunostimulatory nucleic acid.